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PHOTOGRAPHIC INTELLIGENCE MEMORANDUM

SPECIAL INSTALLATION NEAR KRASNOYARSK, USSR
(DODONOV COMPLEX)



Declassification review by NIMA/DOD

GP/I - 200

26 March 1957

CENTRAL INTELLIGENCE AGENCY

OFFICE OF RESEARCH AND REPORTS

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Photography:

[REDACTED]
US Target Mosaic Dodonovo, USSR, Feb. 1956,
1:100,000 (Conf)

Maps

: World 1:1,000,000 (Asia) Krasnoyarsk Ed. 3-AMS 1301 No. 46
USAF Target Complex Chart - Series 500, Krasnoyarsk (6530)
USSR [REDACTED] Oct. 1950 1:500,000 (Conf)
USAF Target Complex Chart - Series 250, Krasnoyarsk (6530)
USSR [REDACTED] Nov. 1950 1:250,000 (Conf)

References

: NIS 26 USSR, Sec 61 Agriculture, Fisheries, and Forestry
(Secret)
NIS 26-IV USSR Central and Eastern Siberia, Sec 24 Topo-
graphy (Conf)
NIS 26 USSR, Sec 32 Highway (Conf)
Detailed Photo Intelligence Report Target Complex
Analysis (FF)
No. 21 Dodonovo (Tab No. A8001) USSR, Headquarters,
USAF Directorate of Intelligence (Secret)

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I. INTRODUCTION

25X1D The Dodonovo Complex is located 28 miles northeast of Krasnoyarsk on the east bank of the Yenisey River. The Complex was covered by small scale "Genetrix" photography on [REDACTED] Selected prints of the area have been rectified and stereoscopically studied.

25X1B Specific building functions and operational processes are undeterminable in many instances. [REDACTED]

25X1B [REDACTED] not visible due to the extremely small scale of the photography and the prevailing snow cover. Heavy shadows, especially in areas of hilly terrain, and smoke, presumably from stacks, also handicap detailed interpretation.

25X1A The annotated graphic (enclosure 1) is a two-diameter enlargement of a section of the US target mosaic sheet of Dodonovo, USSR, dated February 1956 and numbered [REDACTED] Many minor features discernible on the photography have not been plotted or annotated on the Mosaic. Due to the limitations of the photography all measurements must be considered only approximate even though not so qualified in the text. The term "miles" used to denote distance throughout this report is statute miles.

II. GENERAL

Activity in the Dodonovo Complex, which stretches for roughly 18 miles along the east bank of the Yenisey River just north of the 56th parallel, contrasts sharply with that of the surrounding country.

The most prominent natural feature of the area is the Yenisey River as it flows northward in a winding course, forming the western boundary of the Complex. It is widest, 1.5 miles, at the southwest corner of the Complex, and narrowest, 2,100', as it leaves the northwest corner of the area between steep slopes. The major built-up part of the Complex is situated on a 16-square-mile alluvial lowland on the east bank of the river. A dissected upland, snow-covered at the time of photography, rises to over 1,000' above sea level on both sides of the river. Forests cover most of the upland east of the river; to the west a smaller proportion of the highland is forested.

25X1B For the purpose of presentation, the Complex is divided into the following six areas: Shumikha Area, [REDACTED] Excavation and Waste Dump Area, North Industrial Area, Main Residential Area, South Industrial Area, and River Port Area. In addition, further information regarding service facilities is presented under the functional headings of transportation, electric power, and water supply.

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III. ANALYSIS OF SPECIFIC AREAS

1. Shumikha Area

The Shumikha Area is located in the extreme northern part of the Complex on hilly terrain. It extends for about three miles in a north-west-southeast direction. At its southeast extremity is the village of Shumikha (8). Centrally situated are two forced-labor compounds (6), the larger of which covers an area 1,800' x 1,500' and encloses approximately 30 buildings, mostly barrack-type structures averaging 150' x 40' in size. The smaller compound, about 800' x 450', contains several scattered buildings. The compound headquarters (7) are situated close by the compounds and on the main route of travel. They consist of four barrack-type structures, each 150' x 40', and a number of smaller buildings. The town of Shumikha consists of single-row housing separated by a road, a pattern similar to that of other towns in the Complex area. Main housing consists of approximately 30 buildings in an area 1,300 x 500'.

2. Underground Excavation and Waste Dump Area

In hilly terrain about 1.7 miles west of the town of Shumikha, nine waste dumps (9) are located in an area approximately 5,400' x 3,600'. Each dump forms a fan or finger-shaped pattern approximately 200' x 200'. Several small associated structures probably house equipment for excavation operations. All waste piles are situated just below the ridge level. Four are on a slope that faces the river, and five are over the ridge on the opposite side. Steam plumes are observed adjacent to six of the waste dumps. A hard-surfaced road (11), seven miles long, follows the ridge and connects this activity with the North Industrial Area. What appears to be a power transmission line cuts more directly across three miles of hilly terrain between the Excavation and Waste Dump Area and the North Industrial area.

3. North Industrial Area

Considerable activity is apparent in this Area, particularly in the vicinity of the freight yard (18) and terminus of the ridge road (17). Storage and preliminary treatment of material mined in the excavation area may take place here. Spur tracks and possible crane facilities are associated with a large open area approximately 270' x 150'. Two plumes of steam are visible, one issuing from a probable locomotive and the source of the other undeterminable. A freight yard and storage area (18) occupy an area 2,200' x 1,600'. Bordering several lines of track are 20 freight sheds, each 180' x 40', and in an adjacent storage section to the east are 12 buildings, the largest 200' x 50'.

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Industrial activity is centered in a compact group of buildings (15) 600' x 270' overall. Smoke, which obscures detail, is coming from an unidentified source within this building group. The typical mottled appearance of newly-piled coal or ore indicates that an area 400' x 400' (16) is used for coal/ore storage. Three rectangular objects, each 60' long, lie along the north edge of this storage area.

Adjacent to the ridge road is a dark-toned, rectangular-shaped pit or reservoir 500' x 200' (19).

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A group of 35 to 40 buildings (21) appear to provide maintenance and repair facilities for the freight yard and storage facilities in the area, and housing for associated personnel.

A large forced-labor compound (6) is located in an enclosed area 2,800' x 1,800', containing approximately 40 barrack-type structures each about 150' x 40'. Outside the compound to the west is a group of 8 to 10 smaller buildings, probably housing administration facilities. Workers' housing (13) appears to be located in an area 900' x 400' containing approximately 30 barrack-type structures each 150' x 40'. An adjacent area 900' x 400' (14) is apparently being cleared for additional housing.

4. Main Residential Area

Midway between the north and south extremities of the Complex is a large residential area, more than half of which is still under development. The overall dimensions are approximately two miles by one and one-half miles.

One prominent feature is a large housing development (30) consisting of about 185 multi- and single-story-type structures. These buildings are constructed in a space estimated to be about 25 percent of a total area of 5,400' x 2,200' that is under development for this type of housing. Multi-storied residences, each 125' x 40' predominate.

A second large housing development of apartment-type structures (35) consists of two sections, each 3,600' x 1,400'. One section of approximately 105 buildings is almost completed. In the second section, 15 buildings are up and construction is underway on others. The most common type of structure is multi-storied and rectangular shaped, measuring 120' x 60'. This housing development appears more pretentious than the one previously mentioned (30).

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A fenced area 1,500' x 1,300' (32) contains three large U-shaped buildings, each 200' x 100' overall, and ten associated smaller structures. This area appears to be a training center serving the residential area.

A fenced area (33) containing 38 barrack-type structures, each 180' x 50', is believed to be workers' housing. Twenty similar-shaped structures are located outside of this enclosure to the south.

Two small structures (22), possibly housing water-pumping equipment, are situated at the north end of what appears to be a pipeline scar (23). This scar is 3,600' long and extends from the possible pumping station south and east into the residential area. Two less-prominent parallel-running scars extend eastward from the main pipeline (23).

One of the largest structures (25) in the entire Complex, 400' x 180' in size, is thought to be part of an equipment assembly activity. It is monitor-roofed and has associated storage facilities (24) consisting of three large pitch-roofed structures of similar shape and size, each 360' x 75', which may house parts to be assembled in the big building. A road connects these activities. Nearby to the east are 12 identically-shaped buildings, each 125' x 45'. Three small structures are on the south side of the large assembly building.

A mound of irregular shape, 360' x 150' overall (26) is a possible coal pile. An access road connects it with the main highway.

An unidentified fenced-in square-shaped area 360' x 270' (27), contains three small structures.

A large multi-story U-shaped building (29) 360' x 270' probably houses offices for administration of many of the Complex activities. An enclosed equipment storage area (28) 600' x 250' is associated.

Three large pitch-roofed structures of similar size and shape (31), each 180' x 150', are unidentified. One is under construction. They are served by both road and rail.

Approximately 20 structures of various sizes are scattered throughout an area (34) similar in appearance to the maintenance shops (21). The two largest structures are each 170' x 50' in size. This facility appears to be associated with the housing development (35).

5. South Industrial Area

Extending for three miles along the former bank of the Yenisey is what appears to be the major industrial section of the Complex. Size and layout of buildings, steam plumes, and smoke, are evidences of considerable industrial activity.

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A compact group of buildings (40) and two sources of smoke indicate a manufacturing activity. A large pitch-roofed building 200' x 100' can be identified, but smoke obscures much detail of the other structures nearby. Just south of the smoke sources are two large adjoining buildings, each 250' x 100'.

Still farther south are two steam plumes and a fenced barracks and storage area 3,100' x 1,100'. Fifteen of the largest buildings in this enclosure are approximately 180' x 50' each. To the west, just across the railroad track, is a fenced area 900' x 700' containing 14 barrack-type structures, each 150' x 50'.

Located still farther south are approximately 55 storage, machine shop, and assembly-type buildings in an area 4,500' x 900' (42). Assembly operations appear to be located in the central part of this area. Associated storage and machine shops are to the north and south. Buildings for receiving and shipping goods border the track just to the west. The largest structure in the central building group is 270' x 100'. At the west end of it, lined up side by side, are six buildings each 100' x 50'. Adjacent to these are four structures of similar size that provide shipping facilities. What appears to be a power transmission line enters this area from the east. Locomotives are the probable sources of steam plumes observed in the area.

A fenced area 1,800' x 700' (37) is a freight yard containing 15 structures served by spur tracks. An H-shaped building 200' x 180' overall, and seven rectangular storage-type structures, each 180' x 50', are prominently outlined. Steam plumes coming from two sources, probably locomotives, and ten small oval tank-shaped objects are also observed in this area. Nearby, to the northeast, is another fenced area containing seven storage-type structures. To the south is an enclosed area 550' x 450' (39) which also contains seven storage-type buildings.

Housing for workers in this area is provided by approximately 50 barrack-type structures (38), each 150' x 40'. In addition, about 83 uniformly-spaced, family-type dwellings occupy an area 2,000' x 1,800' (36).

In wooded terrain about a mile east of the South Industrial Area several cleared lanes intersect a rectangular area 1,800' x 1,300' (41), within which there is a fenced section 270' x 270' enclosing five small unidentified oval-shaped objects.

6. River Port Area

The primary function of this area in the southern part of the Complex is the provision of river port facilities. Little industrial activity is noted. Wharfage (44) is provided by two pier-like projections, each 70' long, and a cleared section of river-bank quay 700' long by 400' wide. Lumber appears to be stowed on a section of this quay.

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Near the site of this apparent lumber storage is a lumber mill (45). Associated with it are six buildings, the largest of which measures 250' x 100'. To the south are 16 more buildings. The largest of these 450' x 70', is a warehouse-type structure. North of the river-bank quay is a fenced area 4,500' x 900' (43) containing what appears to be scattered piles of lumber.

Additional port facilities (48) cover an area 5,400' x 1,500' overall. Prominent is the evenly-spaced arrangement of approximately 25 rectangular structures, each 180' x 50', believed used for storage of goods. These buildings occupy most of the southern half of this area. Still farther south, close by the main rail line, are five similarly-shaped storage buildings. In the northern half of the area is a compact group of 30 buildings, the storage type predominating. Along the river bank are several small unidentified objects which differ from each other somewhat in size and shape. There appears to be a locomotive operating in the area.

East of the main rail line is a fenced rectangular area 1,000' x 400' (46) containing seven tank-shaped objects located along a spur track. This area is probably used for POL storage. Close by is an area of irregular shape and undetermined use, served by a rail spur. Another fenced area (47), 900' x 450', encloses a number of structures of various shapes and sizes. Here the most noticeable feature is a large steam plume which issues from an undetermined source and obscures much building detail.

Also on the east side of the railroad is one of the largest forced labor camps (49) in the Complex area. Three compounds enclose a total of approximately 60 barrack-type structures, five large U-shaped buildings, and a number of small houses. Just east of these enclosures is an open storage area 700' x 700', and 3,000 yards farther east is a fenced area 1,500' x 900' containing nine regular shaped objects, the two largest being 180' x 100' each. These objects appear to be either partially buried or embanked by earth.

IV. SERVICE FACILITIES

1. Transportation

A railroad and all-weather highway extend the entire length of the Complex. The railroad, which probably connects with Krasnoyarsk to the southwest, runs through the built-up area and ends on the east bank of the Yenisey, just south of the Shumikha area. Here, on the narrow river bank, activity is apparent and it is possible that the track is being extended northward. However, shadows from the hills obscure much detail along this stretch of river bank. Much farther south in the Complex, a railroad bridge is being constructed over the stream which flows northwestward between the Main Residential Area and the South Industrial Area.

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The railroad appears to be the principal means of transportation in midwinter. At the time of photography, 11 steam locomotives were operating in the Complex, along the main line. One was moving northward and three were headed south toward Krasnoyarsk. One of the latter was pulling a train estimated to be 800' long.

The all-weather highway, in general, parallels the railroad in the River Port and South Industrial Areas. It swings east before turning north through the Main Residential Area, and then passes the terminus of the ridge road, at the foot of the upland. This dark-toned ribbon of highway, flanked by snow, appears to be a well-traveled thoroughfare. In the vicinity of the railroad bridge previously noted, there is evidence of construction work to extend a section of highway. The river is frozen and covered with snow from bank to bank. There is no indication, however, that the frozen surface is being utilized for transportation.

2. Electric Power

No power generating units can be identified in the Complex. Probable source of electricity for the Complex is Krasnoyarsk, 28 miles to the southwest. Swaths cut through the timber mark the course of transmission lines that supply electricity to various activities of the Complex. Two main lines appear to extend northward over hilly terrain east of the principal built-up sections. From these, branch lines run to each functional area to the west. A single line continues northward and supplies electric power for the excavation operations.

3. Water Supply

Southeast of the Complex is a drainage basin covering an area of about five square miles, from which trees have been cleared. This area has the appearance of a water reservoir under development. However, there is no evidence of a dam at the outlet of the basin, where it would be expected.

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